

REMARKS/ARGUMENTS

Specification

Examiner has objected to the specification under 37 CFR 1.75(d)(1) and MPEP 608.01(o). In response, Applicant has cancelled Claim 38.

Claim Rejections

35 USC 102(b)

Examiner has rejected Claims 26, 32 and 38 – 40 under 35 USC 102(b) as being anticipated by Bajka. Specifically, Examiner states:

The Bajka reference discloses a freeze control system comprising: a tub 21 including water (col. 4 Ins. 47-58); piping 24; a heating element 42; a pump 28; an ambient air temperature/second sensor 66; a computer 26; an air blower 30; and a first sensor 70, as claimed.

In response, Applicant has amended Claim 1 to include the limitation:

... a covered ambient air temperature sensor for detecting said ambient air temperature near said spa piping and for generating ambient air temperature signals corresponding to said ambient air temperature near said spa piping....(emphasis added)

Bajka's freeze protection system is for is for the protection of solar panels 41. Bajka states in column 12, line 66, "It is essential that pool water in solar panels 41 not be allowed to freeze in the panels or plumbing." Applicant submits that Bajka's freeze protection cannot be relied upon to adequately protect piping that is not associated with the solar panels. Indeed, Bajka's freeze protection is specifically designed to focus on protection of the solar panels only.

Bajka's Sensor is Uncovered and Positioned in Daylight

Bajka's solar temperature sensor 66 is positioned so that it is uncovered and can receive the rays of the sun. Bajka states in Column 9, lines 36 – 40:

Solar temperature sensor 66 provides a temperature reading which is a combination of ambient and radiant energy. During the day, solar sensor 66, which is positioned in the sun light, reads the availability of radiant energy.

Bajka positions solar temperature sensor 66 in the sun light so that it can read the availability of radiant energy. For example, even though the ambient air temperature may be less than 32 degrees F, on a sunny day the radiant energy of the sun can provide enough heat so that the temperature of the water in the solar panels would be well above freezing. Therefore for Bajka's device, it would be unnecessary to start the freeze protection system for the solar panels because the radiant energy generated by the sun would by itself be sufficient to ensure that the water in the solar panels would not freeze.

Applicant's Ambient Air Temperature Sensor is Covered

In stark contrast to Bajka, Applicant is concerned with protecting covered spa piping, not uncovered solar panels. Therefore, Applicant's ambient air temperature sensor is covered so that it is not positioned in day light. On line 1 on page 4, under the heading "First Preferred Embodiment", Applicant states,

In a first preferred embodiment sensor 17 is mounted to mounting board 22 underneath spa skirt 20 near spa 2's associated piping, as shown in FIG. 6. This location is chosen so that sensor 17 is exposed to the air that is near the piping system of spa 2.

As is clearly shown in Applicant's description, the placement of the ambient air temperature sensor is done so that the sensor is near the spa piping. Unlike solar panels (which are purposely placed to receive sun light) spa piping is typically covered. For example, Applicant's spa piping is covered by spa skirt 20. Therefore, Applicant's ambient air sensor is also covered by the spa skirt so that it senses the temperature of the air near the spa piping. If Applicant were to place the temperature sensor so that it is uncovered (as with Bajka), then the temperature sensor would sense a temperature that is higher than the temperature of the air near the spa piping. This could potentially cause the water in the spa piping to freeze and damage to the spa and the spa piping.

Applicant has also amended Claims 32 and 40 in a manner similar to Claim 26. Therefore, because Applicant has appropriately amended Claims 26, 32 and 40 to include the limitation of "a covered ambient air temperature sensor", Applicant respectfully requests that Examiner withdraw his rejection of Independent Claims 26, 32 and 40. Because all other claims are dependent claims that depend on Claims 26, 32 and 40,

Applicant respectfully requests that Examiner withdraw his rejections of all other claims as well.

35 USC 103

Examiner has rejected claims under 35 USC 103 as being unpatentable over a combination of references. In response, Applicant submits that these claims should now be allowable for the reasons stated above.

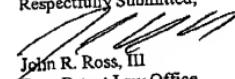
New Claim

Applicant has added new Claim 41. Applicant submits that the limitations of Claim 41 are not disclosed in the prior art and therefore Claim 41 should be allowable.

CONCLUSION

Thus, for all the reasons given above, this application, as the claims are presently limited, define a novel, patentable, and truly valuable invention. Hence allowance of all outstanding claims is respectfully submitted to be proper and is respectfully solicited.

Respectfully Submitted,


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